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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,106	12/05/2003	Robert J. Saccomanno	H26702-CONT-1246	3077

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HONEYWELL INTERNATIONAL INC.
LAW DEPT. AB2
POST OFFICE BOX 2245
MORRISTOWN, NJ 07962-2245

EXAMINER

JACKSON, MONIQUE R

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/729,106

Applicant(s)

SACCOMANNO ET AL.

Examiner

Monique R Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/05</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. The amendment filed 2/28/05 has been entered. Claim 4 has been canceled. New claim 10 has been added. Claims 1-3 and 5-10 are pending in the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 5, 6 and 10 are rejected under 35 U.S.C. 102(a) or (e) as being anticipated by Lee et al (USPN 6,140,456.) Lee et al teach a method of producing parylene polymer films on a wafer substrate by chemical vapor deposition (CVD) wherein the precursor composition can be varied to produce a film with different polymer properties so that the final properties of the film, such as mechanical strength, can be tailored to suit the individual needs of the user (Abstract; Col. 22, line 60-Col. 23, line 5.) Lee et al further teach that by varying the composition during the CVD process, it is possible to vary the composition of the parylene polymer layer such that a user may deposit one type of polymer close to the substrate and change the composition of the polymer progressively by step-wise ceasing delivery of a first precursor and starting delivery of a second precursor, resulting in a different polymer at the surface and a gradient polymer

composition therebetween (Col. 23, lines 3-17.) Lee et al also teach that subsequent different layers of polymer may be deposited by changing to third and subsequent precursors (Col. 23, lines 12-14.)

Claim Rejections - 35 USC § 103

5. Claims 1-3 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP2000-71451A (JP'451) in view of Lee et al. JP'451 teaches a piezoelectric ceramic element and production thereof wherein the element comprises a metal electrode of aluminum, titanium or tantalum formed on a ceramic base and then anodizing (*hence producing a corresponding oxide layer on the surface of the metal*) and forming a protective film via an epoxy adhesive wherein the protective film comprises two or more parylene polymer layers formed by CVD wherein the parylene is desirably parylene C, D or N, though fluorine derivatives may also be used (Abstract; Paragraphs 0004-0006, 0009, 0014-0015, 0024-0025, Examples.) JP'451 teaches that the different parylene polymers provide different characteristics to the protective film, i.e. thermal resistance and permeability and hence a multilayer protective film comprising different layers of these parylene polymers provides an improved protective film (Paragraph 0014) wherein the first layer is preferably Parylene N, the second layer is preferably Parylene C or D, and the third or more layer(s) may be formed from Parylene N, Parylene C and Parylene D (0015-0016.) JP'451 does not specifically teach a transition layer between two different parylene layers comprising a mixture of the two different parylene polymers however as discussed in detail above, Lee et al teaches that a parylene film formed by CVD and comprising layers of different parylene polymers may be formed by gradually changing the feed or precursor composition to produce a gradient or transition layer between the two different parylene layers

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wherein by varying the precursor composition, a film with different polymer properties can be produced so that the final properties of the film, such as mechanical strength, can be tailored to suit the individual needs of the user. Hence, it would have been obvious to one having ordinary skill in the art at the time of the invention to select Parylene C and/or D as the second, third or more layer as taught by JP'451 and to produce the parylene polymer layers taught by JP'451 utilizing the step-wise method taught by Lee et al resulting in a gradient or transition layer between the two different parylene polymer layers having the combined properties of both polymers. With respect to Claims 5-8, the Examiner takes the position that the anodized metal surface on an electrode of aluminum which would form an aluminum oxide surface layer thereon reads upon instant Claim 8, and that the epoxy adhesive and/or the first Parylene N layer with subsequent layers of Parylene C, D and/or N would also read upon the "adhesion promoting layer" of instant Claim 5.

Response to Arguments

6. Applicant's arguments with respect to claims 1-3 and 5-10 have been considered but are moot in view of the new ground(s) of rejection.

Terminal Disclaimer

7. The terminal disclaimers filed on 2/28//05 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent 6,586,048 and/or any patents issuing from Application Numbers 10/318,961 and 10/754,921 have been reviewed and are accepted. The terminal disclaimers have been recorded. Accordingly, the double patenting rejections recited in the prior office action have been withdrawn.

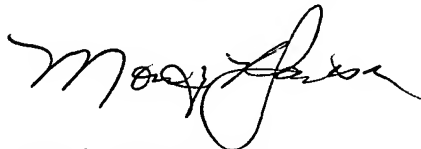
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 571-272-1508.

The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Monique R. Jackson
Primary Examiner
Technology Center 1700
May 11, 2005